

# Jiangming Yao

## List of Publications by Year in descending order

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115  
papers

3,224  
citations

136950

32  
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161849

54  
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115  
all docs

115  
docs citations

115  
times ranked

1142  
citing authors

#	ARTICLE	IF	CITATIONS
1	New parametrization for the nuclear covariant energy density functional with a point-coupling interaction. Physical Review C, 2010, 82, .	2.9	463
2	Configuration mixing of angular-momentum-projected triaxial relativistic mean-field wave functions. Physical Review C, 2010, 81, .	2.9	163
3	Systematic study of nuclear matrix elements in neutrinoless double- $\beta$ decay with a beyond-mean-field covariant density functional theory. Physical Review C, 2015, 91, .	2.9	121
4	Three-dimensional angular momentum projection in relativistic mean-field theory. Physical Review C, 2009, 79, .	2.9	91
5	Configuration mixing of angular-momentum-projected triaxial relativistic mean-field wave functions. II. Microscopic analysis of low-lying states in magnesium isotopes. Physical Review C, 2011, 83, .	2.9	91
6	Microscopic benchmark study of triaxiality in low-lying states of $^{76}\text{Kr}$ . Physical Review C, 2014, 89, .	2.9	85
7	Ab Initio Treatment of Collective Correlations and the Neutrinoless Double Beta Decay of $^{48}\text{Ca}$ . Physical Review Letters, 2020, 124, 232501.	7.8	79
8	Covariant description of shape evolution and shape coexistence in neutron-rich nuclei at. Nuclear Physics A, 2012, 873, 1-16.	1.5	69
9	Beyond relativistic mean-field studies of low-lying states in neutron-deficient krypton isotopes. Physical Review C, 2013, 87, .	2.9	67
10	Search for multiple chiral doublets in rhodium isotopes. Physical Review C, 2008, 77, .	2.9	66
11	Energy density functional analysis of shape evolution in $^{28}\text{N}$ isotopes. Physical Review C, 2011, 84, .	2.9	66
12	Examining $^{28}\text{N}$ bands. Physical Review C, 2009, 79, .	2.9	66
13	Nuclear matrix element of neutrinoless double- $\beta$ decay: Relativity and short-range correlations. Physical Review C, 2017, 95, .	2.9	64
14	Systematics of low-lying states of even-even nuclei in the neutron-deficient lead region from a beyond-mean-field calculation. Physical Review C, 2013, 87, .	2.9	61
15	Time-odd triaxial relativistic mean field approach for nuclear magnetic moments. Physical Review C, 2006, 74, .	2.9	60
16	Simultaneous quadrupole and octupole shape phase transitions in Thorium. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 726, 866-869.	4.1	60
17	Relativistic description of nuclear matrix elements in neutrinoless double- $\beta$ decay. Physical Review C, 2014, 90, .	2.9	60
18	Global study of beyond-mean-field correlation energies in covariant energy density functional theory using a collective Hamiltonian method. Physical Review C, 2015, 91, .	2.9	55

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19	Rapid structural change in low-lying states of neutron-rich Sr and Zr isotopes. Physical Review C, 2012, 85, .	2.9	53
20	Global dynamical correlation energies in covariant density functional theory: Cranking approximation. Frontiers of Physics, 2014, 9, 529-536.	5.0	53
21	Description of $\gamma$ bands in $^{90}\text{Zr}$ . Physical Review C, 2008, 77, .	2.9	48
22	Beyond relativistic mean-field approach for nuclear octupole excitations. Physical Review C, 2015, 92, .	2.9	48
23	Candidate multiple chiral doublets nucleus $^{106}\text{Rh}$ in a triaxial relativistic mean-field approach with time-odd fields. Physical Review C, 2009, 79, .	2.9	47
24	Beyond-mean-field study of the possible $\alpha$ -bubble structure of $^{34}\text{Si}$ . Physical Review C, 2012, 86, .	2.9	45
25	Generator-coordinate reference states for spectra and $\beta$ decay in the in-medium similarity renormalization group. Physical Review C, 2018, 98, .	4.1	42
26	Does a proton $\alpha$ -bubble structure exist in the low-lying states of $^{34}\text{Si}$ ?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 723, 459-463.	4.1	42
27	Anatomy of molecular structures in $^{20}\text{Ne}$ . Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 753, 227-231.	4.1	40
28	Impurity effect of Lambda hyperon on collective excitations of nuclear core in $^{25}\text{Mg}$ . Nuclear Physics A, 2011, 868-869, 12-24.	1.5	39
29	Enhanced collectivity in neutron-deficient Sn isotopes in energy functional based collective Hamiltonian. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 717, 470-473.	4.1	39
30	Relativistic description of second-order correction to nuclear magnetic moments with point-coupling residual interaction. Science China: Physics, Mechanics and Astronomy, 2011, 54, 204-209.	5.1	33
31	Spin Symmetry for Anti-Lambda Spectrum in Atomic Nucleus. Chinese Physics Letters, 2009, 26, 122102.	3.3	32
32	Quenching of nuclear matrix elements for $\beta$ decay by chiral two-body currents. Physical Review C, 2018, 98, .	2.9	30
33	One-Pion Exchange Current Corrections for Nuclear Magnetic Moments in Relativistic Mean Field Theory. Progress of Theoretical Physics, 2011, 125, 1185-1192.	2.0	30
34	Microscopic particle-rotor model for the low-lying spectrum of hypernuclei. Physical Review C, 2014, 90, .	2.9	30
35	Low-energy structure and anti-bubble effect of dynamical correlations in $^{46}\text{Ar}$ . Physical Review C, 2014, 89, .	2.9	30
36	Microscopic study of low-lying spectra of hypernuclei based on a beyond-mean-field approach with a covariant energy density functional. Physical Review C, 2015, 91, .	2.9	30

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37	Searching for a $4\pi$ -linear-chain structure in excited states of $^{16}\text{O}$ with covariant density functional theory. <i>Physical Review C</i> , 2014, 90, .	2.9	29
38	Polarization effect on the spin symmetry for anti-Lambda spectrum in $^{16}\text{O} + \Lambda$ system. <i>Chinese Physics C</i> , 2010, 34, 1425-1427.	3.7	28
39	Octupole correlations in low-lying states of $^{150}\text{Nd}$ and $^{150}\text{Sm}$ and their impact on neutrinoless double- $\beta$ decay. <i>Physical Review C</i> , 2016, 94, .	2.9	28
40	Beyond-mean-field study of elastic and inelastic electron scattering off nuclei. <i>Physical Review C</i> , 2015, 91, .	2.9	26
41	Triaxially deformed relativistic point-coupling model for hypernuclei: A quantitative analysis of the hyperon impurity effect on nuclear collective properties. <i>Physical Review C</i> , 2015, 91, .	2.9	26
42	Chiral geometry of higher excited bands in triaxial nuclei with particle-hole configuration. <i>Physical Review C</i> , 2010, 82, .	2.9	25
43	Efficient method for computing the Thouless-Valatin inertia parameters. <i>Physical Review C</i> , 2012, 86, .	2.9	24
44	<i>Ab Initio</i> Calculation of the Contact Operator Contribution in the Standard Mechanism for Neutrinoless Double Beta Decay. <i>Physical Review Letters</i> , 2021, 127, 242502.	7.8	24
45	Multi-reference many-body perturbation theory for nuclei. <i>European Physical Journal A</i> , 2022, 58, 1.	2.5	24
46	Generator coordinate method for hypernuclear spectroscopy with a covariant density functional. <i>Physical Review C</i> , 2016, 93, .	2.9	23
47	Novel triaxial structure in low-lying states of neutron-rich nuclei around $A \approx 100$ . <i>Physical Review C</i> , 2016, 93, .	2.9	23
48	Beyond-mean-field approaches for nuclear neutrinoless double beta decay in the standard mechanism. <i>Progress in Particle and Nuclear Physics</i> , 2022, 126, 103965.	14.4	22
49	Microscopic description of quantum shape fluctuation in C isotopes. <i>Physical Review C</i> , 2011, 84, .	2.9	21
50	Magnetic moments of $^{33}\text{Mg}$ in the time-odd relativistic mean field approach. <i>Science in China Series G: Physics, Mechanics and Astronomy</i> , 2009, 52, 1586-1592.	0.2	20
51	<i>Ab initio</i> benchmarks of neutrinoless double- $\beta$ decay in light nuclei with a chiral Hamiltonian. <i>Physical Review C</i> , 2021, 103, .	2.9	19
52	LAMBDA AND ANTI-LAMBDA HYPERNUCLEI IN RELATIVISTIC MEAN-FIELD THEORY. <i>International Journal of Modern Physics E</i> , 2010, 19, 2538-2545.	1.0	18
53	Tensor Coupling Effects on Spin Symmetry in the Anti-Lambda Spectrum of Hypernuclei. <i>Chinese Physics Letters</i> , 2011, 28, 092101.	3.3	18
54	Beyond-mean-field study of the hyperon impurity effect in hypernuclei with shape coexistence. <i>Physical Review C</i> , 2017, 95, .	2.9	18

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55	Coexistence of collective and noncollective structures in Sn118. <i>Physical Review C</i> , 2010, 81, .	2.9	17
56	Effect of pairing correlations on nuclear low-energy structure: BCS and general Bogoliubov transformation. <i>Physical Review C</i> , 2013, 88, .	2.9	17
57	Disappearance of nuclear deformation in hypernuclei: A perspective from a beyond-mean-field study. <i>Physical Review C</i> , 2018, 97, .	2.9	16
58	Odd-even parity splittings and octupole correlations in neutron-rich Ba isotopes. <i>Physical Review C</i> , 2018, 97, .	2.9	15
59	Effects of triaxial deformation and pairing correlation on the proton emitter Tm145. <i>Physical Review C</i> , 2008, 77, .	2.9	14
60	Shape coexistence and strongly coupled bands in Sb118. <i>Physical Review C</i> , 2010, 82, .	2.9	14
61	Anharmonicity of multi- $\hat{\epsilon}$ octupole-phonon excitations in Pb208: Analysis with multireference covariant density functional theory and subbarrier fusion of O16+Pb208. <i>Physical Review C</i> , 2016, 94, .	2.9	13
62	Low-energy hypernuclear spectra within a microscopic particle-rotor model with a relativistic point-coupling hyperon-nucleon interaction. <i>Physical Review C</i> , 2016, 93, .	2.9	12
63	Nuclear Structure from the In-Medium Similarity Renormalization Group. <i>Journal of Physics: Conference Series</i> , 2018, 1041, 012007.	0.4	12
64	Benchmark neutrinoless double- $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"> \langle \text{mml:mi} \rangle \hat{I}^2 \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ decay matrix elements in a light nucleus. <i>Physical Review C</i> , 2020, 102, .	2.9	12
65	Binding energy differences of mirror nuclei in a time-odd triaxial relativistic mean field approach. <i>Physical Review C</i> , 2007, 76, .	2.9	11
66	Semimicroscopic modeling of heavy-ion fusion reactions with multireference covariant density functional theory. <i>Physical Review C</i> , 2015, 91, .	2.9	11
67	Beyond mean-field approach for pear-shaped hypernuclei. <i>Science China: Physics, Mechanics and Astronomy</i> , 2019, 62, 1.	5.1	11
68	Collective excitations of $\hat{I}^{\nu}$ hypernuclei. <i>Nuclear Physics A</i> , 2013, 914, 151-159.	1.5	10
69	Application of an efficient generator-coordinate subspace-selection algorithm to neutrinoless double- $\hat{I}^2$ decay. <i>Physical Review C</i> , 2021, 104, .	2.9	10
70	Systematic study of the symmetry energy coefficient in finite nuclei. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2012, 39, 015107.	3.6	8
71	Configuration mixing in low-lying spectra of carbon hypernuclei. <i>Science China: Physics, Mechanics and Astronomy</i> , 2017, 60, 1.	5.1	8
72	Microscopic analysis of shape transition in neutron-deficient Yb isotopes. <i>Physical Review C</i> , 2018, 97, .	2.9	8

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73	g factors of nuclear low-lying states: A covariant description. Science China: Physics, Mechanics and Astronomy, 2011, 54, 198-203.	5.1	7
74	Structure of hypernuclei in relativistic approaches. International Review of Nuclear Physics, 2016, , 263-303.	1.0	7
75	SENSITIVITY OF THE NUCLEAR COLLECTIVITY TO THE PAIRING STRENGTH IN $^{150}\text{Nd}$ . International Journal of Modern Physics E, 2011, 20, 494-499.	1.0	6
76	Magnetic moments of $\hat{I}$ hypernuclei within the time-odd triaxial relativistic mean-field approach. Physical Review C, 2013, 88, .	2.9	6
77	A systematic study of even-even nuclei from Ne to Ca in covariant density functional theory with triaxiality. Progress of Theoretical and Experimental Physics, 2014, 2014, 113D03-113D03.	6.6	6
78	Nuclear matrix elements for neutrinoless double-beta decay in covariant density functional theory. International Journal of Modern Physics E, 2017, 26, 1740020.	1.0	6
79	Transition from vibrational to rotational character in low-lying states of hypernuclei. Physical Review C, 2017, 96, .	2.9	6
80	Deformation constrained relativistic mean-field approach with fixed configuration and time-odd component. Chinese Physics C, 2009, 33, 98-100.	3.7	5
81	Quadrupole collectivity and shell closure in neutron-rich nuclei near $N=26$ . Physical Review C, 2019, 99, .		
82	Structural evolution of the intruder band in $^{118}\text{Sn}$ . Chinese Physics C, 2009, 33, 838-841.	3.7	4
83	RECENT PROGRESS IN RELATIVISTIC MANY-BODY APPROACH. International Journal of Modern Physics E, 2006, 15, 1447-1464.	1.0	3
84	Exotic Magnetic Rotation in $^{22}\text{F}$ . Chinese Physics Letters, 2010, 27, 122101.	3.3	3
85	Microscopic description of nuclear structure around $\text{Zr}80$ . Physical Review C, 2010, 82, .	2.9	3
86	Effects of Pairing Correlations on Formation of Proton Halo in $^{9}\text{C}$ . Chinese Physics Letters, 2010, 27, 092101.	3.3	3
87	Superallowed Fermi transitions in RPA with a relativistic point-coupling energy functional. Science China: Physics, Mechanics and Astronomy, 2011, 54, 1131-1136.	5.1	2
88	Systematic study of hypernuclear magnetic moments under a perturb treatment. European Physical Journal A, 2013, 49, 1.	2.5	2
89	Neutrinoless double-beta decay in covariant density functional theory. AIP Conference Proceedings, 2015, , .	0.4	2
90	Existence problem of proton semi-bubble structure in the $21^+$ state of $^{34}\text{Si}$ . European Physical Journal A, 2017, 53, 1.	2.5	2

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91	Relativistic mean-field and beyond approaches for deformed hypernuclei. AIP Conference Proceedings, 2019, , .	0.4	2
92	Advances in modeling nuclear matrix elements of neutrinoless double beta decay. Science Bulletin, 2021, 66, 3-5.	9.0	2
93	Single-particle resonance states of $^{122}\text{Zr}$ in relativistic mean-field theory combined with real stabilization method. Chinese Physics C, 2009, 33, 101-104.	3.7	1
94	Covariant Density Functional Theory for Nuclear Structure and Application in Astrophysics. Nuclear Physics A, 2010, 834, 436c-439c.	1.5	1
95	LOW-LYING STATES IN $^{30}\text{Mg}$ : A BEYOND RELATIVISTIC MEAN-FIELD INVESTIGATION. International Journal of Modern Physics E, 2011, 20, 482-487.	1.0	1
96	IMPURITY EFFECT OF $\Lambda$ HYPERON ON SHAPE-COEXISTENCE NUCLEUS $^{44}\text{S}$ IN THE ENERGY FUNCTIONAL BASED COLLECTIVE HAMILTONIAN. International Journal of Modern Physics E, 2012, 21, 1250024.	1.0	1
97	Mass and lifetime of unstable nuclei in covariant density functional theory. Physica Scripta, 2013, T154, 014010.	2.5	1
98	Present status of coupled-channels calculations for heavy-ion subbarrier fusion reactions. EPJ Web of Conferences, 2016, 117, 08003.	0.3	1
99	Beyond the relativistic mean-field approximation "collective correlations. International Review of Nuclear Physics, 2016, , 517-560.	1.0	1
100	MIRROR NUCLEI $^{12}\text{B}$ AND $^{12}\text{N}$ IN TIME-ODD TRIAXIAL RELATIVISTIC MEAN FIELD THEORY. International Journal of Modern Physics E, 2006, 15, 1513-1521.	1.0	0
101	Structure of nuclei far from the stability in relativistic approach. European Physical Journal: Special Topics, 2007, 150, 139-144.	2.6	0
102	Restoration of rotational symmetry in deformed relativistic mean-field theory. Chinese Physics C, 2009, 33, 21-23.	3.7	0
103	Towards Lambda-nucleon coupling constants in relativistic mean field theory. Chinese Physics C, 2009, 33, 64-66.	3.7	0
104	Covariant density functional theory with spectroscopic properties and a microscopic theory of quantum phase transitions in nuclei. Journal of Physics: Conference Series, 2011, 267, 012043.	0.4	0
105	A new covariant density functional with point-coupling and its application. Journal of Physics: Conference Series, 2011, 321, 012016.	0.4	0
106	Covariant Density Functional Theory "highlights on recent progress and applications. , 2011, , .		0
107	Energy density functional analysis of shape coexistence in [ <sup>sup</sup> 44]S. , 2012, , .		0
108	Microscopic description of quantum phase transitions in nuclei. , 2012, , .		0

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109	Covariant density functional theory and applications in nuclear physics and r-process. EPJ Web of Conferences, 2012, 38, 02001.	0.3	0
110	Energy density functional description of low-lying states in neutron-deficient Sn isotopes. Physica Scripta, 2013, T154, 014012.	2.5	0
111	Covariant density functional theory for exotic nuclei near the neutron drip-line. Journal of Physics: Conference Series, 2013, 413, 012005.	0.4	0
112	Recent developments in heavy-ion fusion reactions around the Coulomb barrier. EPJ Web of Conferences, 2016, 122, 07002.	0.3	0
113	LAMBDA AND ANTI-LAMBDA HYPERNUCLEI IN RELATIVISTIC MEAN-FIELD THEORY. , 2009, , .		0
114	COVARIANT DESCRIPTION OF THE LOW-LYING STATES IN NEUTRON-DEFICIENT $\text{Kr}$ ISOTOPES. , 2011, , .		0
115	BEYOND THE RELATIVISTIC MEAN-FIELD APPROXIMATION FOR LOW-LYING STATES: LIMITATION OF CURRENT IMPLEMENTATION. , 2013, , .		0